CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 79 - 24

WASTE DISCHARGE REQUIREMENTS
FOR
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
ROBERT A. SKINNER FILTRATION PLANT
SLUDGE DISPOSAL SITE
NEAR MURRIETA

The California Regional Water Quality Control Board, San Diego Region (hereafter Regional Board), finds that:

1. Mr. Richard W. Balcerzak, Chief of Operations, The Metropolitan Water District of Southern California (hereafter discharger), submitted an incomplete Report of Waste Discharge dated June 29, 1978. After receipt of additional information requested by staff, the complete Report of Waste Discharge was accepted on March 9, 1979.

2. The discharger proposes to establish two waste disposal sites, approximately 3.4 and 2.6 acres each, to receive up to 20 cubic yards per month of dewatering waste sludges from the Robert A. Skinner Filtration Plant. The disposal sites are located southeast of the filtration plant as shown on Attachment "A" incorporated herein and made a part of this Order.

3. The 240 million gallon per day (MGD) capacity of the Robert A. Skinner Filtration Plant provides potable water to the San Diego County Water Authority for distribution in San Diego County, and to Eastern Municipal Water District and Western Municipal Water District of Riverside County, to partially meet the demands for potable water within these agencies. The filtration plant capacity may be increased to 340 MGD in the future.

4. Waste sludges from the filtration plant are presently dewatered in three sludge retention basins, located east of the filtration plant. Sludge solids settle to the basin bottom and the supernatant is pumped back to the filtration plant for treatment. Order No. 75-18, adopted by the Regional Board on June 9, 1975, regulates the discharge of sludge from the filtration plant to the retention basins.

5. The Robert A. Skinner Filtration Plant has been in operation since November 1976. Sludge generated to date from the filtration process has not yet been removed from the sludge retention basins. It has become necessary to empty the retention basins of the material thus far generated. The discharger reports that a cost comparison has shown it to be less expensive to dispose of the sludge in an onsite disposal area rather than haul the sludge to an existing landfill.

6. The discharger reports that the following is a general description of the proposed method of disposal site operation and the sequence of filling operations:

   (a) The site to be filled will be cleared, as needed, of all native plants.
   (b) The base of the site will be disced; dry sludge will be spread over the area to a depth not to exceed 6 inches, and then redisced to produce homogeneity with the base material.
   (c) The outer edge of the fill will be left higher than the main fill so that rain runoff can be controlled.
   (d) The fill material will be compacted and left until the next lift is made.
   (e) After a lift has reached 15 feet in height, a drain berm will be placed across the front, and the next lift will be moved back to accommodate the berm. Slope drains will be connected to the berm drains to carry runoff and prevent erosion.
   (f) The fill slope will be allowed to return to native growth as soon as possible.

7. The discharger reports that in the immediate disposal site area, alluvial deposits, varying in thickness from 3 to 75 feet, overlie bedrock consisting of fractured phyllite. In the proximity of the proposed disposal site the groundwater is at a depth of 20 to 50 feet, and locally perched groundwater is at depths of 2 to 15 feet.

8. The discharger reports that gas production resulting from sludge decomposition in the landfill will not be a problem due to the extremely small amount of organic matter in the sludge.

9. This disposal site meets the criteria contained in the California Administrative Code, Title 23, Chapter 3, Subchapter 15, for classification as a disposal site suitable to receive water treatment sludges.

10. The discharger reports that the capacity of the disposal site is approximately 100,000 cubic yards of dried sludge and cover material. It is anticipated that the disposal sites will not be topped out for 50-70 years.

11. The discharger reports that there are 2 wells located 0.4 and 0.5 miles respectively, from the proposed disposal site. These wells are monitored by The Metropolitan Water District of Southern California for groundwater elevation and sampling for water quality analysis.

12. The proposed 2 disposal sites would be located between one-quarter and one-half mile southeast of the treatment plant in the N½ of Section 10, T7S, R2W, SBB&M, in the Auld Hydrologic Subarea of the Auld Hydrologic Subunit of the Santa Margarita Hydrologic Unit.

13. The "Comprehensive Water Quality Control Plan Report for the San Diego Basin (9)" (Basin Plan), adopted by this Regional Board on March 17, 1975 and approved by the State Water Resources Control Board on March 20, 1975, and updated by the Regional Board on February 27, 1978, established the following water quality objectives for surface and ground waters of the Auld Hydrologic Subunit:

Constituent	Surface water		Groundwater	
Total dissolved solids	500	mg/l	500	mg/l
Chloride	250	mg/l	250	mg/l
Percent sodium	60		60	
Sulfate	250	mg/l	250	mg/l
Nitrate	--		10	mg/l
Nitrogen and phosphorus	*		--	
Iron + Manganese	0.35	mg/l	0.35	mg/l
Methylene blue active substances	0.5	mg/l	0.5	mg/l
Boron	0.5	mg/l	0.5	mg/l
Dissolved oxygen	**		--	
Odor	None		None	
Turbidity	20	JTU	5	JTU
Color	20	Units	15	Units
Fluoride	1	mg/l	1	mg/l

14. Surface waters in the Auld Hydrologic Subunit are beneficially used for:

(a) Municipal and domestic supply
(b) Agricultural supply
(c) Industrial service supply
(d) Industrial process supply
(e) Nonwater contact recreation
(f) Warm freshwater habitat
(g) Wildlife habitat

* Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total phosphorus (P) concentrations shall not exceed 0.05 mg/l in any stream at the point where it enters any standing body of water, nor 0.025 mg/l in any standing body of water.

** Ninety percent or more of natural seasonal minimum oxygen concentration and more than 5.0 mg/l maintained at least 90 percent of the time.

Note: JTU = Jackson Turbidity Units
mg/l = milligrams per liter

15. Groundwaters in the Auld Hydrologic Subunit are beneficially used for:

    (a) Municipal and domestic supply
    (b) Agricultural supply
    (c) Industrial service supply
    (d) Groundwater recharge

16. The Basin Plan also contains the following prohibitions applicable to the proposed discharge:

    "The dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste directly into inland waters or watercourses or adjacent to the watercourses in any manner which may permit its being washed into the watercourse is prohibited.

    "Dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste into natural or excavated sites below historic water levels or deposition of soluble industrial wastes at any site is prohibited, unless such site has been specifically approved by the Regional Board for that purpose.

    "Land grading and similar operations causing soil disturbance which do not contain provisions to minimize soil erosion and limit suspended matter in area runoff are prohibited."

17. The discharger has certified and the Regional Board finds that all local agencies with jurisdiction have approved use of the site for the intended purposes.

18. The Metropolitan Water District of Southern California has prepared a negative declaration in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) and the State Guidelines.

19. The Regional Board has reviewed the negative declaration and determined there will be no substantial adverse changes in the environment as a result of the project.

20. The Regional Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this proposed discharge.

21. The Regional Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, That The Metropolitan Water District of Southern California shall comply with the following for the Robert A. Skinner Filtration Plant:

A. DISCHARGE SPECIFICATIONS

1. The treatment or disposal of waste shall not cause pollution or a nuisance as defined in Section 13050(m) of the California Water Code.

2. Waste materials shall not be disposed of outside of the designated disposal areas shown on Attachment "A".

3. The disposal areas shall be protected from any washout or erosion of wastes or covering material, and from inundation, which could occur as a result of floods having a predicted frequency of once-in-100-years.

4. Surface drainage from tributary areas, and internal site drainage from surface or subsurface sources shall not contact or percolate through wastes discharged at the site.

5. Group 1 wastes shall not be deposited at this site.

6. No liquids shall be deposited at this site, and water used during disposal site operations shall be limited to a minimal amount reasonably necessary for dust control purposes.

7. Annually, prior to the anticipated rainfall period, all necessary runoff diversion channels shall be in place to prevent erosion or flooding of the site.

8. Runoff from tributary, irrigated areas shall not be allowed to flow into water treatment sludge wastes or areas containing water treatment sludge wastes.

9. No water treatment sludge wastes shall be placed in ponded water from any source.

10. The exterior surfaces of the disposal area shall be graded to promote lateral runoff of precipitation and to prevent ponding.

11. The discharger shall remove and relocate any wastes which are discharged at this site in violation of these requirements.

B. PROHIBITION

The discharge of waste to surface drainage courses or to usable groundwater is prohibited.

C. PROVISIONS

1. The discharge of wastes, other than dry water treatment sludge wastes as hereinbefore described, to the proposed disposal sites is prohibited.

2. Disposal of water treatment sludge wastes shall not commence until it is determined that the measures necessary to meet waste discharge requirements have been taken.

3. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.

4. The discharger shall file with this Regional Board a report of any material change or proposed change in the character, location or quantity of this waste discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours or ownership of the disposal areas.

5. The discharger shall file a written report within 90 days after the total quantity of wastes discharged at this site equals 75 percent of the reported capacity of the site. The report shall contain a schedule for studies, design and other steps needed to provide additional capacity, or the total quantity discharged shall be limited to the reported capacity.

6. The discharger shall comply with Monitoring and Reporting Program No. 79-24 as specified by the Executive Officer. Unless otherwise specified, the Monitoring and Reporting Program shall be in effect upon adoption of this Order. In accord with the provisions of Section 13267(b) of the Water Code, the monitoring reports shall be submitted under penalty of perjury.

7. Ninety days prior to discontinuing the use of this site for waste disposal the discharger shall submit a technical report to the Regional Board describing the methods and controls to be used to assure protection of the quality of surface and ground waters of the area during final operations and with any proposed subsequent use of the land.

   This report shall be prepared by or under the supervision of a registered engineer or a certified engineering geologist. The method used to close the site and maintain protection of the quality of surface and ground waters shall comply with waste discharge requirements established by this Regional Board.

8. This Regional Board considers the property owner to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge or water applied to this property during subsequent use of the land for other purposes.

9. The Robert A. Skinner Filtration Plant sludge disposal site shall be completely constructed and operable prior to the initiation of disposal of wastes at the site. A report from the design engineer certifying the adequacy of each component of the disposal site shall be submitted by the discharger prior to commencement of the discharge. The certification report shall contain a requirement-by-requirement analysis, based on acceptable engineering practices, of how the process and physical designs of the disposal site will ensure compliance with the waste discharge requirements. The design engineer shall affix his signature and engineering license number to the certification report and should submit it prior to construction of the facilities. The discharge shall not be initiated until:

   (a) The certification report is received;
   (b) The Regional Board has been notified of the completion of facilities by the discharger.
   (c) An inspection of the facilities has been made by staff of the Regional Board; and
   (d) Staff has notified the discharger by letter that the discharge can be initiated.

10. This Order expires on March 26, 1984. Should the discharger wish to continue the discharge of wastes beyond the expiration date of this Order, 12 copies of a complete Report of Waste Discharge should be filed at this Regional Board's office 60 days prior to the expiration date.

NOTIFICATION

These requirements have not been officially reviewed by the Environmental Protection Agency as required by Federal Law (Public Law 92-500 and 95-217) and are not issued pursuant to Section 402 of the Federal Water Pollution Control Act as amended in 1977.

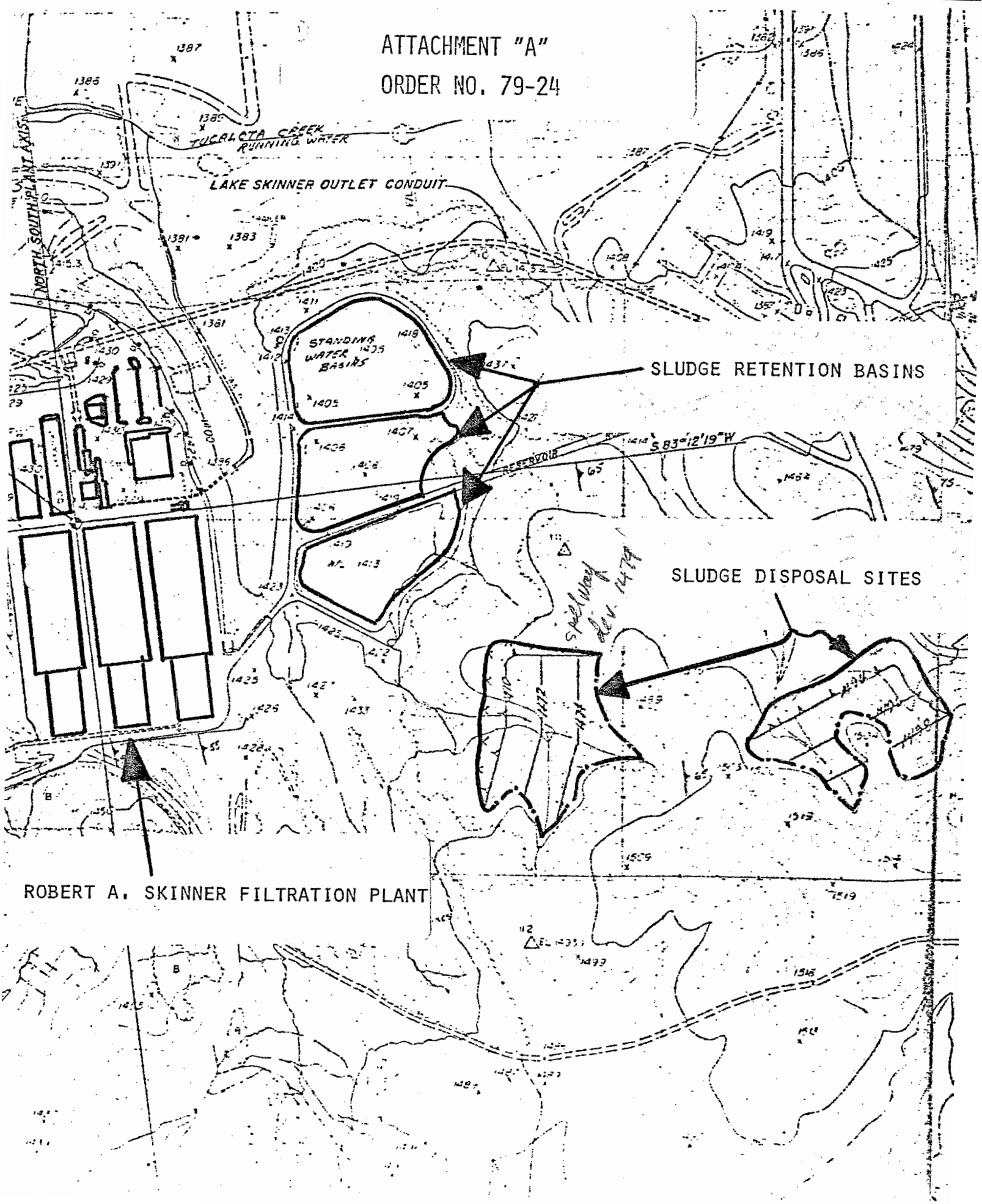
Attachment "A"

I, Leonard Burtman, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on March 26, 1979.

Leonard Burtman

Leonard Burtman
Executive Officer

ATTACHMENT "A"
ORDER NO. 79-24



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM NO. 79 - 24
FOR
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NEAR MURRIETA

GENERAL PROVISIONS FOR SAMPLING AND ANALYSIS

Unless otherwise noted, all sampling, sample preservation, and analyses shall be conducted in accordance with the current edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants," promulgated by the United States Environmental Protection Agency, or approved by the Executive Officer.

All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health or a laboratory approved by the Executive Officer.

MONITORING PROGRAM

The discharger shall submit technical reports concerning the quantity and quality of the discharge in accordance with the following schedule.

A. Subsurface Monitoring

After the completion of excavation of all areas where wastes will be deposited, the discharger shall notify the Executive Officer of the elevations of the bottoms of the excavations, subsurface conditions encountered, and measures proposed to ensure compliance with the requirements of this Order.

B. Site Monitoring

The discharger shall submit an annual report consisting of a map showing the site boundaries, excavated areas, filled areas, and a report of the estimated total volume of wastes deposited in the landfill and the estimated capacity remaining.

C. Groundwater Monitoring

A representative sample of water from a well approved by the Executive Officer shall be collected and analyzed for the following items annually and reported annually (in the absence of a suitable nearby downstream well, a monitoring well shall be constructed at a location approved by the Executive Officer prior to the initiation of disposal site operation):

Determination	Unit
Total dissolved solids	mg/l
Chloride	mg/l
Sulfate	mg/l
Sodium	mg/l
Aluminum	mg/l
Iron	mg/l

Ordered by Leonard Burtman

Leonard Burtman
Executive Officer
March 26, 1979

Note: mg/l = milligrams per liter

DB:mld